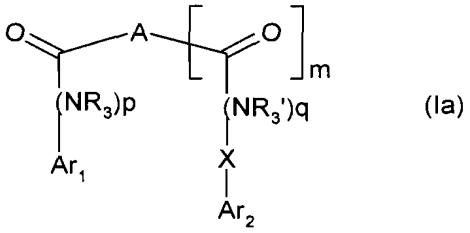
Claim Amendments:

1 to 11 (Cancelled)

12. (Currently amended) ~~The compound according to claim 1,~~ A compound which binds the G-quadruplex structure of DNA or RNA having the formula (Ia)



(Ia)

wherein m, p and q, are identical or different integers from 0 to 1

wherein

—• A is[[:]]

——◊ a 5- or 6-membered heterocyclic radical containing a sulfur, oxygen or nitrogen,

~~◊ a phenyl, or~~

~~◊ a diazine or triazine group,~~

wherein the heterocyclic~~, phenyl, diazine or triazine radicals are~~ radical is optionally substituted with one or more substituents chosen from halogen, C1-C4 alkyl, thio, oxy or amino substituents wherein any such substituents are optionally substituted with one or more short-chain alkyl chains containing 1 to 4 carbon atoms;

wherein when the heterocyclic radical represented by A is a pyridine, the pyridine is 2,6-disubstituted or 2,4-disubstituted with $Ar_1 - (NR_3)p - CO$ and $(CO)m - (NR'_3)q - X - Ar_2$;

- Ar_1 and Ar_2, ~~may be~~ which are the same, ~~or different~~

~~wherein Ar_1 and Ar_2 are identical, they~~ are a nitrogen-containing aromatic ring possessing a quaternary atom represented by a quinoline optionally substituted with at least

- one group N(Ra)(Rb) wherein Ra and Rb, are identical or different, are hydrogen or C1-C4 alkyl or
- one C1-C4 alkyl or alkoxy group, or

◊ wherein the nitrogen atom is quaternized with a C1-C4 alkyl chain optionally substituted with a hydroxyl, carboxyl, C1-C4 alkoxy, C1-C4 alkylthio, amino, C1-C4 alkylamino or C1-C4 dialkylamino for each alkyl group;

~~wherein Ar_1 and Ar_2 are different~~

~~Ar_1 represents one of the above possibilities for Ar_1 and Ar_2 represents~~
~~* phenyl optionally substituted with halogen, C1-C4 alkoxy, cyano, carbonylamino wherein said carbonylamino is optionally substituted with one or more substituents independently selected from the group consisting of C1-C4 alkyl, a guanyl, a C1-C4 alkylthio, amino, C1-C4 alkylamino, C1-C4 dialkylamino for each alkyl group, nitro, C1-C4 alkyleneamino and C2-C4 alkenyleneamino, or~~
~~* a benzamidine,~~
~~* a pyridyl,~~
~~* a mono- or bi- or tricyclic aromatic or nonaromatic heterocyclic nucleus containing 0 to 2 heteroatoms per ring provided that at least one heteroatom has at least one ring optionally substituted with one or more substituents independently selected from C1-C4 alkyl C1-C4 alkylene and C2-C4 alkenylene;~~

- R_3 and R'_3, are identical or different, are independently hydrogen, C1-C4 alkyl or aralkyl wherein alkyl is C1-C4;
- X is a single bond, or C1-C4 alkyl, a C2-C4 alkenyl, alkynyl or phenyl;

said compound of formula (Ia) may be in all the possible isomeric forms; or an addition salt with an inorganic or organic acid or with an inorganic or organic base of said compound of formula (Ia)~~; or a prodrug of said compound of formula (Ia)~~.

13. (Previously presented) The compound of formula (Ia) according to claim 12 wherein X is C1-C4 alkyl, the other substituents of the compound of formula (Ia) being as defined in claim 12, said compound of formula (Ia) may be in all the possible isomeric forms; or an addition salt with an inorganic or organic acid or with an inorganic or organic base of said compound of formula (Ia).

14. (Currently amended) The compound according to claim 12, wherein A is chosen from the heterocyclic groups pyridyl or thienyl~~, a phenyl, a diazine or a triazine~~.

15. (Cancelled)

16. (Currently amended) The compound according to claim 12, wherein A is meta-disubstituted with the groups ~~"nitrogen-containing aromatic ring possessing a nitrogen atom in quaternary form~~ $\underline{Ar_1}$ – $(NR_3)p$ – CO**[["]]** and **[["]]**$(CO)m$ – $(NR'_3)q$ – $\underline{Ar_2}$ ~~aromatic or nonaromatic ring"~~, and wherein A is optionally substituted by halogen.

17 to 18 (Cancelled)

19. (Original) The compound according to claim 12, wherein m, p and q are the integer 1.

20. (Original) The compound according to claim 12, wherein p and q are the integer 1.

21. (Currently amended) The compound according to claim 12, wherein Ar_2 is ~~independently~~ selected from the group consisting of 4-amino- or 4-methylamino-, 4-dimethylamino- or 4-alkoxy-[[quinolyl and]] –quinolinium, wherein said quinolinium is optionally substituted with one or two methyl groups.

22. (Original) The compound according to claim 12, wherein R_3 and R'_3 are hydrogen.

23. (Currently amended) The compound according to claim 12 ~~claim 1~~, selected from the group consisting of:

- bis[(1-methylquinolinio-6-yl)amido]-2,6-pyridinedicarboxylic acid diiodide;
~~- 2-[(1-methylquinolinio-6-yl)amido]-6-[(4-dimethylamino-1-methylquinaldinio-6-yl)amido]-2,6-pyridinedicarboxylic acid diiodide;~~
- bis[(1-methylquinolinio-6-yl)amido]-2,6-pyrazinedicarboxylic acid diiodide;
~~- bis[(1-methylquinolinio-6-yl)amido]-1,3-benzenedicarboxylic acid diiodide;~~
- bis[(1-methylquinaldinio-6-yl)amido]-2,6-pyridinedicarboxylic acid diiodide;
~~- 2-[(1-methylquinolinio-6-yl)amido]-6-[(4-aminoquinaldinio-6-yl)amido]-2,6-pyridinedicarboxylic acid iodide;~~
~~- bis[(1-methylquinaldinio-6-yl)amido]-2,6-benzenedicarboxylic acid diiodide;~~
- bis[(1-methylquinolin-6-yl)amido]-2,4-pyridinedicarboxylic acid diiodide;
~~- 2-[(1-methylquinolinio-6-yl)amido]-6-[(1-methylquinolinio-3-yl)amido]-2,6-pyridinedicarboxylic acid iodide;~~
~~- 2-[(1-methylquinolinio-6-yl)amido]-6-[(1-methylquinolinio-5-yl)amido]-2,6-pyridinedicarboxylic acid iodide;~~
- bis[(1-methylquinolinio-3-yl)amido]-2,6-pyridinedicarboxylic acid diiodide;
~~- 2-[(1-methylquinolinio-6-yl)amido]-6-[2(-1-methylpiperidinio-1-yl)ethylamido]-2,6-pyridinedicarboxylic acid diiodide;~~
~~- 2,6-pyridinedicarboxylic acid 2-[(1-methylquinolinio-3-yl)amide]-6-[quinolin-3-yl)amide] iodide;~~
~~- 2,6-pyridinedicarboxylic acid 2-[(1-methylquinolinio-3-yl)amide]-6-[1-(2-hydroxyethyl)quinolinio-3-yl)amide] iodide;~~ and
- 4-bromo-2,6-pyridinedicarboxylic acid bis[(1-methylquinolinio-3-yl)amide] diiodide,

said compound may be in all the possible isomeric forms; or an addition salt with an inorganic or organic acid or with an inorganic or organic base of said compound.

24. (Currently amended) The compound according to claim 12 ~~claim 1~~, selected from the group consisting of:
- bis[(1-methylquinolinio-6-yl)amido]-2,6-pyridinedicarboxylic acid diiodide;
~~- 2-[(1-methylquinolinio-6-yl)amido]-6-[(4-dimethylamino-1-methylquinaldinio-6-yl)amido]-2,6-pyridinedicarboxylic acid diiodide;~~
- bis[(1-methylquinolinio-6-yl)amido]-2,6-pyrazinedicarboxylic acid diiodide;
~~- bis[(1-methylquinolinio-6-yl)amido]-1,3-benzenedicarboxylic acid diiodide;~~
- bis[(1-methylquinaldinio-6-yl)amido]-2,6-pyridinedicarboxylic acid diiodide;
~~- 2-[(1-methylquinolinio-6-yl)amido]-6-[(4-aminoquinaldinio-6-yl)amido]-2,6-pyridinedicarboxylic acid iodide;~~
~~- bis[(1-methylquinaldinio-6-yl)amido]-2,6-benzenedicarboxylic acid diiodide;~~
- bis[(1-methylquinolin-6-yl)amido]-2,4-pyridinedicarboxylic acid diiodide;
~~- 2-[(1-methylquinolinio-6-yl)amido]-6-[(1-methylquinolinio-3-yl)amido]-2,6-pyridinedicarboxylic acid iodide;~~
~~- 2-[(1-methylquinolinio-6-yl)amido]-6-[(1-methylquinolinio-5-yl)amido]-2,6-pyridinedicarboxylic acid iodide;~~
- bis[(1-methylquinolinio-3-yl)amido]-2,6-pyridinedicarboxylic acid diiodide;
~~- 2,6-pyridinedicarboxylic acid 2-[(1-methylquinolinio-3-yl)amide]-6-[quinolin-3-yl)amide] iodide;~~
~~- 2,6-pyridinedicarboxylic acid 2-[(1-methylquinolinio-3-yl)amide]-6-[1-(2-hydroxyethyl)quinolinio-3-yl)amide] iodide;~~ and
- 4-bromo-2,6-pyridinedicarboxylic acid bis[(1-methylquinolinio-3-yl)amide] diiodide,
said compound may be in all the possible isomeric forms; or an addition salt with an inorganic or organic acid or with an inorganic or organic base of said compound.

25. (Cancelled)

26. (Currently amended) The compound according to claim 12 ~~claim 1~~, which has a telomerase inhibiting activity.

27. (Currently amended) The compound according to claim 12 ~~claim 1~~, which has an anticancer activity.

28. (Cancelled)

29. (Currently amended) The compound according to claim 12 ~~claim 1~~ having the formula (Ia) ~~or a prodrug thereof~~, said compound of formula (Ia) may be in all the possible isomeric forms; or an addition salt with a pharmaceutically acceptable inorganic or organic acid or with an inorganic or organic base of said compound of formula (Ia).

30. (Currently amended) A pharmaceutical composition comprising an effective cancer inhibiting amount of a compound of claim 12 ~~claim 1~~.

31. (Original) The pharmaceutical composition according to claim 30, further comprising active ingredients of other chemotherapy medicaments against cancer.

32. (Withdrawn) The method according to claim 37 wherein the compound according to claim 1 is administered in combination with another anticancer compound.

33. (Withdrawn) The method as claimed in claim 32, wherein the anticancer compound is selected from the group consisting of alkylating agents, platinum derivatives, antibiotics, antimicrotubule agents, anthracyclines, groups I and II topoisomerases, fluoropyrimidines, cytidine analogs, adenosine analogs, L-asparaginase, hydroxyurea, trans-retinoic acid, suramin, irinotecan, topotecan, dexrazoxane, amifostin, herceptin, estrogen hormones androgen hormones, and antivascular agents.

34. (Withdrawn) The method according to claim 33, wherein each of the compounds or treatments is administered simultaneously, separately or sequentially.

35. (Withdrawn) The method according to claim 37 wherein the compound according to claim 1 is administered in combination with radiation.

36. (Withdrawn) The method according to claim 35, wherein each of the compounds or treatments is administered simultaneously, separately or sequentially

37. (Withdrawn – Currently amended) A method of treating a disease selected from the group consisting of cancers, genetic diseases and pilosity diseases which comprises administering to a patient in need of said treatment an effective amount of a compound according to claim 12 ~~claim 1 having the formula (IB)~~ or a pharmaceutically acceptable salt thereof.

38. (Withdrawn) The method according to claim 37 wherein the disease is cancer.

39. (Withdrawn) The method according to claim 38 wherein said cancer is selected from the group consisting of cancer of the breast, stomach, colon, lungs, ovaries, uterus, brain, kidney, larynx, lymphatic system, thyroid, urogenital tract, bones, pancreas, and melanomas.

40. (Withdrawn) The method according to claim 39 wherein said cancer is cancer of the breast, colon or lungs.

41. (Withdrawn) The method according to claim 37 wherein said genetic diseases are selected from the group consisting of Bloom's syndrome, Werner's syndrome, Rothmund-Thomson syndrome and ataxia telangiectasia syndrome.

42. (Withdrawn) The method of claim 37 wherein said pilosity disease is hyperpilosity.